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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,236	01/30/2004	Srinivas Tadepalli	STL11259.00	6219

7590 12/30/2005

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EXAMINER	
TZENG, FRED	
ART UNIT	**PAPER NUMBER**
2651	

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/768,236	TADEPALLI ET AL.	
	Examiner	Art Unit	
	Fred Tzeng	2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/30/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-25 are presented for examination.

Priority

2. This application claims benefit of 60/449,566 filed on February 21, 2003.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on January 30, 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahn (USPN 6,259,576) in view of Schirle (USPN 5,898,545) and further in view of Bauck et al (USPN 4,189,759).

RE claims 1 and 15, Ahn discloses a servo track writing apparatus (see column 2 lines 60-65) comprising: a head assembly including a servo head to write a servo pattern or information on a disc or discs supported on a spindle hub (see column 3 lines 57-67 and column 4 lines 1-10, 37-56).

However, Ahn does not disclose a merge assembly to operate the head assembly and the spindle hub between a retracted position to load and unload the disc or discs and a merged position to encode servo information and a shroud proximate to a downstream region of the head assembly along an operating sector of the head assembly.

Schirle teaches a merge assembly to operate the head assembly and the spindle hub between a retracted position to load and unload the disc or discs and a merged position to encode servo information (see column 1 lines 59-67) and a shroud proximate to a downstream region of the head assembly along an operating sector of the head assembly (see column 3 lines 65-67 and column 4 lines 1-2).

Furthermore, neither Ahn nor Schirle discloses that the head assembly is cantilevered.

Bauck teaches a cantilevered beam assembly in a disk drive to reduce or eliminate head resonance that introduce instability in servo loop (see column 4 lines 11-17 and column 3 lines 60-68 and column 4 lines 1-7).

Ahn, Schirle and Bauck are combinable because they are from the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Ahn invention by including the merge assembly and the shroud from Schirle in order to reduce air turbulence that can cause increased disk flutter in a disk drive expressly stated at column 1 lines 46-55 of Schirle, and further modifying the Ahn to include a cantilevered head assembly from Bauck in order to reduce or eliminate head resonance that introduce instability in servo loop (see column 4 lines 11-17 and column 3 lines 60-68 and column 4 lines 1-7 of Bauck).

RE claims 2, 3 and 17, Schirle in view of Ahn and Bauck discloses that the servo track writing apparatus includes at least one of an air dam downstream of the cantilevered head assembly or an air stripper upstream of the cantilevered head assembly (see column 4 lines 25-44).

RE claim 4, Schirle in view of Ahn and Bauck discloses that at least one of an air dam or air stripper includes a plurality of plates spaced to form a gap therebetween and the disc or discs being rotatable in the gap between the plurality of plates (see column 2 lines 46-63 and column 4 lines 25-44).

RE claim 5, Schirle in view of Ahn and Bauck discloses an actuator mechanism coupled to the air dam and the stripper to move the air dam and the stripper between a

retracted or open position to load and unload the disc or discs and a merged or closed position to write servo information to the disc or discs (see column 4 lines 25-44).

RE claim 6, Schirle in view of Ahn and Bauck discloses that a cam assembly including a plurality of fingers movable between a retracted position and a merged position to maintain separation of a plurality of discs to merge the cantilevered head assembly and the plurality of discs (see column 4 lines 14-24 and column 2 lines 46-63).

RE claims 7-9 and 18, Schirle in view of Ahn and Bauck discloses that the spindle hub is coupled to a spindle block and the cantilevered head assembly is coupled to a servo block and the spindle block and the servo block are operable between a retracted position and a merged position to form the merge assembly to load and unload the disc or discs and encode servo information and the shroud is coupled to one of the spindle block or the servo block (see column 4 lines 35-44 and column 2 lines 46-63).

RE claims 10, 11, 13, 14, 19 and 20, Schirle in view of Ahn and Bauck discloses that the shroud is operable between a retracted position and an operating position to encode servo information and further comprising a shroud actuator assembly to operate the shroud between the retracted position and the operating position (see column 3 lines 65-67 and column 4 lines 1-35).

RE claim 12, Schirle in view of Ahn and Bauck discloses that the air dam movable between a retracted position and a merged position and the shroud is coupled

to the air dam and movable therewith to position the shroud proximate to the disc or discs to write servo information to the disc or discs (see column 4 lines 14-44).

RE claim 16, Schirle in view of Ahn and Bauck discloses that the spindle hub removably supports a plurality of discs and the shroud has a dimension extending between opposed inner and outer discs of the plurality of discs supported on the spindle hub (see column 2 lines 28-45).

Claims 21-25 are the method steps associated with the apparatus of claims 1-20 and are therefore rejected on the same basis as the apparatus claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication from the examiner should be directed to Fred Tzeng whose telephone number is 571-272-7565. The examiner can normally be reached on weekdays from 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-7565 for After Final communications.

9. Informal regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred F. Tzeng

December 26, 2005